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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,750	02/14/2002	Claude Gauthier	03226.170001;P7188	9466
32615	7590	12/30/2003	EXAMINER	
ROSENTHAL & OSHA L.L.P. / SUN			COX, CASSANDRA F	
1221 MCKINNEY, SUITE 2800			ART UNIT	
HOUSTON, TX 77010			PAPER NUMBER	

2816

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/075,750

Applicant(s)

GAUTHIER ET AL.

Examiner

Cassandra Cox

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 19, 30 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-18, 20-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/27/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's arguments filed 08/19/03 have been fully considered but they are not persuasive. Therefore the rejection with respect to claims 1-7, 9-18, 20-29, and 31-33 are repeated below.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 9-18, 20-29, and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Jenkins et al. (Measuring Jitter and Phase Error in Microprocessor Phase-Locked Loops, Keith A. Jenkins and James P Eckhardt, IEEE Design & Test of Computers, Apr-Jun. 2000, pp. 86-93).

In reference to claim 12, Jenkins discloses on page 90 (second column, first paragraph) a computer system for estimating jitter in a phase locked loop, comprising: a processor (see page 87, column 1, second paragraph); a memory (not shown, but considered to be an inherent part of a computer); and software instructions stored in the memory adapted to cause the computer system to: obtain a representative power supply waveform having noise; digitize the representative power supply waveform ( $V_{DDA}$ ) having noise (this is seen to be performed by the oscilloscope prior to any

simulation); input the digitized representative power supply waveform into a simulation of the phase locked loop (this is also seen to be performed by the oscilloscope, wherein after digitizing the power supply waveform it is used in the simulation of the phase locked loop); and estimate jitter of the phase locked loop from the simulation (see Figure 6 and entire document). The same applies to claims 1 and 23.

In reference to claim 13, Jenkins also discloses that the representative power supply waveform is obtained from a physical system (see page 87, column 1, second paragraph). The same applies to claims 2 and 24.

In reference to claim 14, Jenkins further discloses that the physical system may comprise a printed circuit board (see page 86, column 2, final paragraph). The same applies to claims 3 and 25.

In reference to claim 15, Jenkins further discloses that the physical system may comprise a chip package (see page 86, column 2, final paragraph). The same applies to claims 4-5, 16, and 26-27.

In reference to claim 17, Jenkins further discloses that the representative power supply waveform is obtained from a location on a physical system adjacent to an intended location of the phase locked loop (see Figure 6 and page 91, lines 5-10). The same applies to claims 6 and 28.

In reference to claim 18, Jenkins discloses on pages 87 (the second paragraph) and 89 (the last paragraph) that the representative power supply waveform is obtained from a simulation of a power supply (this is seen to be accomplished when the injected

noise is made to emulate the noise found in a particular system). The same applies to claims 7 and 29.

In reference to claim 20, Jenkins discloses in Figure 3 that the representative power supply waveform comprises a noise waveform combined with a power supply waveform. The same applies to claims 9 and 31.

In reference to claim 21, Jenkins discloses on page 91 that the representative power supply waveform is dependent on at least one selected from the group consisting of temperature (which is disclosed in lines 5-10 on page 91), voltage, frequency, and manufacturing process. The same applies to claims 10 and 32.

In reference to claim 22, Jenkins discloses on page 92 (second column, second paragraph) that the simulation of the phase locked loop is dependent on at least one selected from the group consisting of temperature, voltage, frequency, and manufacturing process. The same applies to claims 11 and 33.

***Allowable Subject Matter***

4. Claims 8, 19, and 30 are allowed.
5. The following is an examiner's statement of reasons for allowance: Claims 8, 19, and 30 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure because the closest prior art of record fails to disclose a system in which the simulation of the power supply is performed using a first simulation tool and the simulation of the phase locked loop is performed using a second simulation tool in

combination with the rest of the limitations of the base claims and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

6. Applicant's arguments filed on 08/19/03 have been fully considered but they are not persuasive. Applicant's argument that in the prior art reference (Jenkins) the power supply waveform is not digitized is not persuasive. The noise generator disclosed in Jenkins outputs a power supply waveform ( $V_{DDA}$ ) that is digitized by the digitizing oscilloscope (see Jenkins page 90 lines 28-29) and then used in the simulation of the phase locked loop.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 703-306-5735. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM and on alternate Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (703)-308-4876. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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CC

December 17, 2003



TIMOTHY P. CALLAHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800